



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
PO Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,295	03/27/2002	Peter Orywol	Mo-7021/LeA33,984	9358

157 7590 07/16/2003

BAYER POLYMERS LLC
100 BAYER ROAD
PITTSBURGH, PA 15205

[REDACTED] EXAMINER

[REDACTED] VO, HAI

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

[REDACTED] 1771

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/089,295	ORYWOL ET AL.	
	Examiner	Art Unit	
	Hai Vo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 March 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 9-22 is/are pending in the application.
- 4a) Of the above claim(s) 15-20 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 9-14,21 and 22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 March 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
- 4) Interview Summary (PTO-413) Paper No(s) _____ .
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____ .

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 9-14, 21 and 22, drawn to a hollow profile.

Group II, claim(s) 15-20, drawn to a process for the production of a foam-filled hollow profile.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claim 9 is anticipated or obvious over DE 3 031 229 (see rejections below). As the recited structure does not make a contribution over the prior art, unity of invention is lacking and restriction is appropriate.

2. During a telephone conversation with Lyndanne M. Whalen on 06/25/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 9-14, 21 and 22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 10-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

3. Claims 21 and 22 are objected because they are dependent from non-elected claim 15.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 9, 10, 12, 21 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over DE 3 031 229. The page numbers referred to below correspond to those of the English translation of the Germany Patent DE 3031 229. Any foam-filled hollow profile comprising a support material insert which is embedded into a polyurethane foam would read on the claimed subject matter. DE'229 teaches a foam-filled hollow profile comprising a paper strip that is completely covered with a polyurethane foam (pages 5 and 6). It is apparent that DE'229 is using the same material such as paper to form a support

material insert as Applicants, it is the examiner's position that the paper strip in DE'229 would inherently have the required delayed foam-forming permeability. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) wherein products of identical chemical composition can not have mutually exclusive properties. Figure 2 of DE'229 shows one or more lateral edges of the paper strip is turned up in the manner of a trough.

DE'229 is silent as to a window profile or a ski stick which is produced by the process defined in claim 5. However, mere recitation of "window profile" or "ski stick" impacts no definite structure to the claimed device and is therefore found inadequate to convey structure in any patent sense. It has been held that a recitation with respect to the manner in which a claimed hollow profile is intended to be employed does not differentiate the claimed hollow profile from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

The examiner respectfully wishes to point out that claim 9 is a product-by-process claim. It is the examiner's position that the article of DE'229 is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity (a paper strip embedded into or encased with the polyurethane foam). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the

claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The DE'229 reference either anticipates or strongly suggests the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with DE'229.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3 031 229 as applied to claim 9 above, and further in view of Kruecke (US 6,303,667). DE'299 is silent as to a polyurethane foam produced from an excess of diisocyanate polymer. DE'299 is unspecific with respect to amount of diisocyanate and therefore it is necessary and thus obvious to rely on prior art for successfully practicing the invention of DE'299. Kruecke teaches the polyurethane foam produced from an excess of diisocyanate polymer to produce the foam product having a very uniform celled structure and a high thermal insulating capability and therefore suitable for insulating purposes (column 1, lines 26-35, column 9, lines 30-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made to produce the polyurethane foam from an excess of diisocyanate polymer motivated to provide the hollow profile having a very high

thermal insulating capability for thermal insulation purposes which is important to expectation of successfully practicing the invention of DE'299, thus further suggesting the modification.

8. Claims 9-11, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeberl (US 3,811,141) in view of Rizzo (US 4,393,802). Any foam-filled hollow profile comprising a support material insert which is embedded into a polyurethane foam would read on the claimed subject matter. Stoeberl teaches a foam-filled hollow profile 2 comprising a reinforcing insert of a fibrous mat that is encased in a foam material 5 (figure 3, column 2, line 56, column 4, lines 6-10). It is apparent that Stoeberl is using the same material such as fibrous mat to form a support material insert as Applicants, it is the examiner's position that the reinforcing insert in Stoeberl would inherently have the required delayed foam-forming permeability. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) wherein products of identical chemical composition can not have mutually exclusive properties. Stoeberl is silent as to the foam material formed from polyurethane. Rizzo teaches a boat hull being fabricated by polyurethane foam to minimize impact damage and to provide weight for stability (column 5, lines 37-42). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the polyurethane foam to form a boat hull motivated by the desire to minimize impact damage and to provide weight for stability.

Stoeberl as modified by Rizzo is silent as to a window profile or a ski stick which is produced by the process defined in claim 5. However, mere recitation of

"window profile" or "ski stick" impacts no definite structure to the claimed device and is therefore found inadequate to convey structure in any patent sense. It has been held that a recitation with respect to the manner in which a claimed hollow profile is intended to be employed does not differentiate the claimed hollow profile from a prior art boat hull satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

The examiner respectfully wishes to point out that claim 9 is a product-by-process claim. It is the examiner's position that the article of Stoeberl/Rizzo is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity (a reinforcing fibrous mat encased in a polyurethane foam). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The Stoeberl/Rizzo reference strongly suggests the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the

Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Stoeberl/Rizzo.

9. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoeberl (US 3,811,141) in view of Rizzo (US 4,393,802), as applied to claim 9 above, and further in view of Kruecke (US 6,303,667). Stoeberl does not specifically disclose a polyurethane foam produced from an excess of diisocyanate polymer. Stoeberl is unspecific with respect to amount of diisocyanate and therefore it is necessary and thus obvious to rely on prior art for successfully practicing the invention of Stoeberl. Kruecke teaches that a polyurethane foam produced from an excess of diisocyanate polymer is a closed cell, rigid foam to provide weight for stability (column 4, line 55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to produce the polyurethane foam from an excess of diisocyanate polymer motivated to provide the hollow profile made of a closed cell rid foam to provide weight for stability which is important to expectation of successfully practicing the invention of Stoeberl, thus further suggesting the modification.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
July 9, 2003



TERREL MORRIS
EXAMINER
TECHNOLOGY CENTER 1700